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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,961	01/28/2002	Thomas Algie Abrams JR.	MSI-894US	4507
22801	7590	11/04/2004	EXAMINER	
LEE & HAYES PLLC 421 W RIVERSIDE AVENUE SUITE 500 SPOKANE, WA 99201			CZEKAJ, DAVID J	
			ART UNIT	PAPER NUMBER
			2613	
DATE MAILED: 11/04/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

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## Office Action Summary

Application No.

10/058,961

Applicant(s)

ABRAMS, THOMAS ALGIE

Examiner

Dave Czekaj

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-78 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-78 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 03-07-2002.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 6-7, 41, and 76 are rejected under 35 U.S.C. 102(b) as being anticipated by Chiang et al. (5828788), (hereinafter referred to as "Chiang").

Regarding claims 1, 41, and 76, Chiang discloses an apparatus that relates to processing hierarchical video data (Chiang: column 1, lines 10-12).

This apparatus comprises "receiving digital data wherein the data has one pixel resolution of at least 720 and the other pixel resolution greater than 576"

(Chiang: figure 1, column 2, line 67-column 3, lines 1-6, wherein the resolution is 1080x1920), "compressing the digital video data" (Chiang: figure 1, wherein the encoder compresses the data), and "transmitting and/or storing the compressed data" (Chiang: column 8, lines 48-50, wherein the compressed data is transmitted or conveyed over a channel).

Regarding claims 6-7, Chiang discloses "the digital video data has a resolution of 1280 by 720 and 1920 by 1080" (Chiang: column 3, lines 1-5).

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3. Claims 1-5, 41, and 76 are rejected under 35 U.S.C. 102(e) as being anticipated by Frink et al. (6678002), (hereinafter referred to as "Frink").

Regarding claims 1, 41, and 76, Frink discloses an apparatus that relates to editing high definition video data (Frink: column 1, lines 9-10). This apparatus comprises "receiving digital data wherein the data has one pixel resolution of at least 720 and the other pixel resolution greater than 576" (Frink: figure 1a, column 3, lines 10-15, wherein the resolution is 1080x1920), "compressing the digital video data" (Frink: figure 1a, column 3, lines 60-64, wherein the compressing is performed by the resizer), and "transmitting and/or storing the compressed data" (Frink: figure 1a, wherein the compressed data is stored in the SDTV frame buffer).

Regarding claims 2-5, Frink discloses "receiving data through a digital serial interface" (Frink: column 6, lines 1-15, wherein the serial interface is the SMPTE 259M and 292M).

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8-10, 14-16, 21-22, 24, and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang et al. (5828788), (hereinafter referred to as "Chiang").

Regarding claims 8-9, note the examiners rejection for claim 1, and in addition, claims 8-9 differ from claim 1 in that claims 8-9 further require the video to have a color sampling format of 4:2:2 and 4:2:0. Although not disclosed, it would have been obvious to have a sampling format of 4:2:2 and 4:2:0 (Official Notice). Doing so would have been obvious in order to provide a better picture by sampling the input image at the correct format.

Regarding claim 10, although not disclosed, it would have been obvious to receive the video from a digital camera (Official Notice). Doing so would have been obvious since digital cameras are easily transportable from one place to another.

Regarding claims 14 and 43, Chiang discloses "compressing the video using block-based motion predictive coding to reduce temporal redundancy" (Chiang: column 8, lines 10-13, wherein the block based predictive coding is the temporal prediction).

Regarding claims 15 and 44, Chiang discloses "compressing the data using transform coding to reduce spatial redundancy" (Chiang: column 8, lines 10-13, column 11, lines 51-52, wherein reducing spatial redundancy is indicated by the spatially reduced output).

Regarding claims 16 and 45, note the examiners rejection for claims 14 and 15.

Regarding claim 21, although not disclosed, it would have been obvious to maintain a PSNR of at least 30 dB (Official Notice). Doing so would have been obvious in order to eliminate unwanted noise.

Regarding claim 22, Chiang discloses "compressing allows for subsequent decompression and playback of the compressed digital video" (Chiang: figure 1, column 9, lines 15-17, wherein the decompression is performed by the decoder).

Regarding claim 24, Chiang discloses "the decompression and playback produces video having one pixel resolution of at least 720 and the other greater than 576" (Chiang: column 3, lines 1-6, column 9, lines 15-17).

6. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang et al. (5828788), (hereinafter referred to as "Chiang") in view of Kato et al. (6016362), (hereinafter referred to as "Kato").

Regarding claim 11, note the examiners rejection for claim 1, and in addition, claim 11 differs from claim 1 in that claim 11 further requires receiving the video from a telecine. Kato teaches that in order to televise or record a motion picture, it is necessary to convert images on the film into a television signal via a telecine (Kato: column 1, lines 17-22). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Chiang and add the telecine taught by Kato in order to obtain an apparatus that is more diverse by being able to display or record a motion picture from film.

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7. Claims 12-13, 23, 25-39, 42, 46-71, 73-75, and 77-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang et al. (5828788), (hereinafter referred to as "Chiang") in view of Watkins et al. (6507672), (hereinafter referred to as "Watkins").

Regarding claim 12, note the examiners rejection for claim 1, and in addition, claim 12 differs from claim 1 in that claim 12 further requires receiving the data from a recorder. Watkins teaches that recorders can be built using few, low-cost components (Watkins: column 11, lines 60-64, wherein the recorders are the multimedia terminals). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Chiang and add the recorders taught by Watkins in order to obtain an apparatus that provides a cost efficient means for inputting video.

Regarding claim 13, Watkins discloses "receiving data from a network" (Watkins: column 12, lines 1-14).

Regarding claim 23, Watkins discloses "the subsequent decompression and playback of the compressed video produces video of DVD quality" (Watkins: figure 3, column 7, lines 57-60).

Regarding claims 25 and 28, Watkins discloses "transmitting the video at a rate of approximately .5 Mbps to 10 Mbps" (Watkins: column 11, lines 66-67- column 12, lines 1-8, wherein the video can be transmitted up to 10 Mbps).

Regarding claim 26, Watkins discloses "transmitting the video at a plurality of rates" (Watkins: column 11, lines 66-67-column 12, lines 1-8, wherein the plurality of rates are the high and low bandwidth channel rates).

Regarding claim 27, Watkins discloses "the rates are in a range from approximately .1 Mbps to 20 Mbps" (Watkins: column 11, lines 66-67-column 12, lines 1-8, wherein the video can be transmitted up to 10 Mbps).

Regarding claims 29-30, although not disclosed, it would have been obvious to transmit or store at least 5 Gb of data or video having a total runtime of 2 hours (Official Notice). Doing so would have been obvious in order to make the synchronization more efficient by piecing together fewer chunks of data.

Regarding claim 31, Watkins discloses "transmitting or storing the compressed video to a server" (Watkins: figure 7, item 606).

Regarding claim 32, although not disclosed, it would have been obvious to store the compressed data on a tape (Official Notice). Doing so would have been obvious in order to make the apparatus more versatile by being able to transport the tape from one place to another.

Regarding claims 33-34, Watkins discloses "storing the compressed video on a DVD disk" (Watkins: figure 3, column 7, lines 58-60).

Regarding claim 35, Watkins discloses "transmitting or storing the data in an advanced systems format" (Watkins: figure 3, column 7, lines 58-60, wherein the advanced systems format is the DVD disk).



Regarding claim 36, Watkins discloses "transmitting the video to a DVD recorder" (Watkins: figure 3, item 318, wherein the record head records the information onto the DVD).

Regarding claim 37, Chiang discloses "transmitting the video via satellite" (Chiang: column 7, lines 19-20).

Regarding claims 38-39, Watkins discloses "transmitting the video via cable and a network" (Watkins: column 12, lines 1-8, wherein the cable is the cable modem).

Regarding claim 42, note the examiners rejection for claims 1 and 2, and in addition, Chiang discloses "a processor configured to structure video in a stream or file format" (Chiang: column 7, lines 22-28, wherein the file format is the data segments).

Regarding claim 46, note the examiners rejection for claim 18.

Regarding claim 47, note the examiners rejection for claim 40.

Regarding claim 48, note the examiners rejection for claim 35.

Regarding claim 49, note the examiners rejection for claim 19.

Regarding claim 50, note the examiners rejection for claims 1 and 24.

Regarding claim 51, note the examiners rejection for claim 13.

Regarding claims 52-55, note the examiners rejection for claims 6-9.

Regarding claims 56-71, note the examiners rejections for claims 14-21, 23, 25, 30, 34-35, 37-38, and 40, and further note that decompressing and receiving are the complimentary operations to compressing and storing.

Regarding claims 73-74, note the examiners rejection for claims 1, 24, and 29.

Regarding claim 75, Watkins discloses "compressed audio data" (Watkins: column 8, lines 32-33).

Regarding claims 77-78, although not disclosed, it would have been obvious to encode at a rate of .1 Gbps per GHz of processor speed and to decode at a rate of .4 Gbps per GHz processor speed (Official Notice). Doing so would have been obvious in order to maximize the computing ability of the encoder and decoder.

8. Claims 17 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang et al. (5828788), (hereinafter referred to as "Chiang") in view of Haldeman et al. (6801576), (hereinafter referred to as "Haldeman").

Regarding claims 17 and 40, note the examiners rejection for claim 1, and in addition, claims 17 and 40 differ from claim 1 in that claims 17 and 40 further require compressing using a Windows Media codec. Haldeman teaches that one way to reduce video bandwidth is to compress the video before distributing it using Windows Media (Haldeman: column 1, lines 35-40). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Chiang and add the Windows Media codec taught by Haldeman in order to obtain an apparatus that can transmit video over limited bandwidth networks.

9. Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang et al. (5828788), (hereinafter referred to as "Chiang") in view of Cheng et al. (6768817), (hereinafter referred to as "Cheng").

Regarding claims 18-20, note the examiners rejection for claim 1, and in addition, claim 18 differs from claim 1 in that claim 18 further requires a compression ratio of at least approximately 50:1. Cheng teaches that in most multimedia systems, the amount of image data is so large that the use of image data compression is mandatory (Cheng: column 1, lines 24-26). Cheng further discloses using compression ratios of "50:1, 100:1, and 200:1" (Cheng: table VI, column 25, lines 15-25). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Chiang and add the compression ratios taught by Cheng in order to obtain an apparatus that can transmit data over a variety of networks by being able to compress the data at different levels.

10. Claim 72 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chiang et al. (5828788), (hereinafter referred to as "Chiang") in view of Melen et al. (6631205), (hereinafter referred to as "Melen").

Regarding claim 72, note the examiners rejection for claim 50, and in addition, claim 72 differs from claim 50 in that claim 72 further requires a lenticular display. Melen teaches that lenticular displays eliminate the need for special eyeglasses or headgear when viewing stereoscopic images (Melen: column 1, lines 18-55). Therefore, it would have been obvious to one having

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ordinary skill in the art at the time the invention was made to take the apparatus disclosed by Chiang and add the lenticular display taught by Melen in order to obtain an apparatus that is more appealing to a user by eliminating the need for headgear and eyeglasses.

### ***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US-6124893	09-2000	Stapleton, John J.
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US-6144702	11-2000	Yurt et al.
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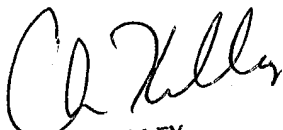
US-5414830	05-1995	Marbot, Roland
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave Czekaj whose telephone number is (703) 305-3418. The examiner can normally be reached on Monday - Friday 9 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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